

Specification Amendments

Please replace paragraph 0036 with the following rewritten paragraph:

0036      Following the dry development process of photoresist layer 20 to form an etching mask, the first photoresist layer 22 may be optionally removed as shown in Figure 1D by a first in-situ ashing process using an oxygen-containing plasma. Additionally, the plasma may contain nitrogen and fluorine to aid in cleaning the plasma reactor chamber of residual particle contamination. For example, exemplary suitable conditions for the first in-situ ashing step of the present invention include flowing into the plasma reactor chamber a hydrofluorocarbon, for example,  $\text{CF}_4$  at 20 to 50 sccm and flowing  $\text{O}_2$  at 10 to 20 sccm at a pressure of 5 to 20 mTorr while maintaining a first RF power source at about 200 to about 300 Watts and a second RF power source at about 100 to 150 Watts. The plasma reactor chamber ambient may optionally include a source of nitrogen, for example, flowing at about 10 to about 30 sccm. Following the in-situ ashing process to remove first photoresist layer 22, a fluorine based chemistry is used in a reactive ion etch (RIE) to etch a via hole 28 through the thickness of the ILD layer 18 to the etching stop layer 16 as shown in Figure 1E. For example, suitable plasma etching gas sources include conventional

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hydrofluorocarbons such as  $\text{CF}_4$ , but preferably include hydrofluorocarbons with a ~~carbon/fluorine~~ fluorine to carbon ratio of at most about 2, for example, fluorine-containing gases such as  $\text{C}_2\text{F}_6$ ,  $\text{CH}_2\text{F}_2$ , and  $\text{C}_4\text{F}_8$  or mixtures thereof to improve etching anisotropy.